

# County of Los Angeles INTERNAL SERVICES DEPARTMENT

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"To enrich lives through effective and caring service"

May 10, 2011

The Honorable Board of Supervisors County of Los Angeles 383 Kenneth Hahn Hall of Administration 500 West Temple Street Los Angeles, CA 90012

Dear Supervisors:

**ADOPTED** 

**BOARD OF SUPERVISORS COUNTY OF LOS ANGELES** 

22

May 10, 2011

SACHI A. HAMAI **EXECUTIVE OFFICER** 

REQUEST FOR APPROVAL TO ACQUIRE COMPUTER AND ELECTRICAL GENERATOR EQUIPMENT (ALL DISTRICTS - 3 VOTES)

CIO RECOMMENDATION: (X) APPROVE () APPROVE WITH MODIFICATION () DISAPPROVE

#### SUBJECT

Request approval to acquire computer and electrical generator equipment with a unit cost greater than \$250,000 to meet the needs of County departments.

# IT IS RECOMMENDED THAT YOUR BOARD:

Authorize the Internal Services Department (ISD) to acquire computer and electrical generator equipment for a total financed expenditure of \$3,759,482, to support Countywide automated applications.

#### PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

On an ongoing basis, ISD acquires data processing equipment to meet the computer application needs of County departments. Pursuant to County Policy, Board approval is required when individual components of this equipment exceed \$250,000.

This request is for approval to acquire computer and electrical generator equipment at a total acquisition cost, including financing, of \$3,759,482 as follows:

 Acquire one (1) large capacity EMC disk storage array to consolidate and replace two old technology storage arrays. The total capital asset cost of this array is \$1,527,190. This acquisition will result in a net 5-year savings of \$3,037,665 due to reduced annual maintenance expenses.

- Acquire one (1) IBM mainframe computer processor to replace old computer technology and increase needed capacity for a total capital asset cost, including financing, of \$1,690,765. This acquisition will result in a net 5-year savings of \$889,161 due to reduced hardware maintenance and software licensing costs.
- Acquire one (1) electrical generator as a backup to the Downey Data Center Uninterruptible Power Supply (UPS) generators for a total capital asset cost, including financing, of \$541,525. This portable generator will provide additional emergency backup power for critical data center computing and chiller systems.

## Implementation of Strategic Plan Goals

The acquisition of this equipment is necessary to meet the information technology requirements of the departments served by ISD and supports the County strategic goal for Operational Effectiveness.

#### FISCAL IMPACT/FINANCING

Equipment acquisitions will be financed as follows:

Equipment	Base Purchase Cost	FY 10-11 Lease Costs	Future FY Lease Costs	Term	Total Financed Costs
EMC Disk Storage	\$1,269,072	\$0	\$305,438	5 Yrs	\$1,527,190
IBM Mainframe Computer	\$1,405,000	\$0	\$338,153	5 Yrs	\$1,690,765
Electrical Generator	\$450,000	\$0	\$108,305	5 Yrs	\$541,525
Total	\$3,124,072	\$0	\$751,896		\$3,759,482

The above acquisitions will be financed through LAC-CAL over five years. Due to the timing of these acquisitions, ISD will not incur a lease payment in the FY 2010-11 Other Charges appropriation for the first year of equipment leasing costs. ISD has requested adequate funding in the FY 2011-12 Proposed Budget, and will request funding in future fiscal years' budget requests. ISD will also incur a total of \$1,192,491 in Services & Supplies (S&S) costs in the current fiscal year for prepaid maintenance for the disk storage and mainframe equipment. ISD recovers all costs through usage-based charges to client departments. No additional NCC is required for these acquisitions.

Honorable Board of Supervisors May 10, 2011 Page 3

#### FACTS AND PROVISIONS/LEGAL REQUIREMENTS

This request complies with the County Equipment Policy that your Board approved on October 16, 2001. This policy requires that departments obtain Board approval to purchase or finance equipment with a unit cost of \$250,000 or greater.

The County's Chief Information Officer recommends approval of this request (CIO Analysis attached).

#### CONTRACTING PROCESS

These equipment items are commodity acquisitions under the statutory authority of the County Purchasing Agent. The acquisitions will be competitively bid by the Purchasing Agent in accordance with the standard County Purchasing policies and procedures.

#### **IMPACT ON CURRENT SERVICES (OR PROJECTS)**

Your approval will ensure that ISD can acquire the resources necessary to operate County computer systems managed by the Department.

#### CONCLUSION

The Executive Office, Board of Supervisors, is requested to return one stamped copy of the approved Board letter to the Director, ISD.

Respectfully submitted,

Tan Tindale

TOM TINDALL

Director

Reviewed by:

**RICHARD SANCHEZ** 

Chief Information Officer

DC:AB:SD:sg

Attachment

c: Chief Executive Office

County Counsel

Executive Officer, Board of Supervisors

# **CIO ANALYSIS**

# REQUEST FOR APPROVAL TO ACQUIRE COMPUTER AND ELECTRICAL GENERATOR EQUIPMENT

CIO	RECOMMENDATION:	△ APPROVE	ROVE WITH MODIFICATION		
	ract Type: New Contract Sole Source Contract	Contract Amendment Hardware Acquisition	Contract Extension Other		
New/	Revised Contract Term	n: Base Term: <u>N/A</u> Yrs.	# of Option Yrs: N/A		
	ract Components: Software Professional Services		Telecommunications		
Proje	ct Executive Sponsor:	Tom Tindall, Director, ISD			
Budg	et Information :		<u> </u>		
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## **Project/Contract Description:**

In compliance with Board policy, Internal Services Department (ISD) is requesting Board authorization to procure computer and electrical generator equipment for a total of \$3,759,482, which includes a combination of financed and one-time purchases.

#### Background:

Periodically, ISD needs to purchase large-scale computer equipment for the County's primary data center located in Downey. The focus of this purchase is to replace two older computer storage arrays and an end-of-life mainframe server, which is expected to save \$3,926,826 in maintenance costs over the next five years. In addition, ISD is requesting authorization to add a new portable generator to supplement the data center's emergency electrical power.

#### **Project Justification/Benefits:**

ISD's computer purchase involves three components:

#### 1. Replacement of a computer storage array

This is a financed purchase of an EMC Symmetrix vMax disk storage array that will replace two older EMC disk storage arrays in the Downey Data Center, which are increasingly becoming costly to maintain and operate. The cost of the new equipment and maintenance is less than the maintenance cost of the old equipment. Over the five year equipment life, the monthly savings will be an average of \$50,628 (52% of the \$92,291 cost without replacement).

Initially, there is no overall increase in storage capacity. However, the new storage array is expandable and can add additional storage engines and disk drives to more than double capacity when demand requires. It is very likely that this equipment will be expanded, with industry estimates forecasting year-over-year growth of 55% for storage capacity.

# 2. Replacement of a mainframe computer server

This is a financed purchase of an IBM z10 Business Class mainframe computer server to replace an IBM z990 mainframe computer server that has reached technological end-of-life and can no longer be upgraded. In addition, the existing server is currently using loaned equipment that cannot be extended and ISD will be billed \$10,000/monthly for this equipment starting July 1, 2011. While the primary reason for this purchase is to replace end-of-life equipment, the software and maintenance cost savings are significant. The total monthly savings over the next five years resulting from this new purchase is \$24,312 (9% of the \$275,332 cost without replacement).

#### 3. New electrical generator

This is a purchase of a new portable electric generator that will be used in conjunction with five existing generators to provide backup power and cooling to the Downey Data Center. ISD is deferring the replacement of the five generators, which are over 30 years old, due to the anticipated occupancy of the new Data Center at the Rancho Los Amigos campus in 2014. This new generator will be used to supplement the Data Center backup power and cooling, and after the Downey site is migrated will be repurposed for other emergency backup power needs.

#### **Project Metrics:**

The new computer equipment projects will be considered complete when the new hardware has been installed, all operational systems have been verified for production release in the ISD data centers, and all computer systems and data have been migrated to the new equipment.

#### Impact on Service Delivery or Department Operations, if Proposal is Not Approved:

If the existing computer storage equipment is not replaced, ISD will incur higher software and equipment maintenance costs to provide the same level of service and the future expansion possibilities would be limited.

Retaining the existing mainframe computer server could impact the availability of applications running on this platform because vendor upgrades are no longer available, would result in higher costs for hardware when the IFL processor loan agreement ends in June 2011, and negate software savings by moving to the new platform.

Deferring the backup generator acquisition would impact ISD's ability to provide adequate power and cooling for the Downey Data Center in case of an outage. The existing five backup generators at the data center would need to operate for another 4 years of service increasing the risk of mechanical failure.

#### Alternatives Considered:

The computer storage and servers are newer models of standard computing platforms used in the data center. The hardware configurations were scaled down to be the most cost-effective.

The replacement of the five old backup generators was considered and found to be not cost effective due to the planned move of the data center in 2014. After the short-term lease was found to be the same cost as the purchase, the decision was made to go with a new electrical backup generator.

## **Project Risks:**

Minimal risks exist for the installation of new storage and server equipment because they are highly compatible with the existing infrastructure. The installation of the backup electrical generator will decrease the risk from a generator failure in event of a site power outage.

The Chief Information Security Officer (CISO) has reviewed the request and did not identify any security risks or issues.

#### **Risk Mitigation Measures:**

Proper planning and careful implementation activities will be established to minimize risk.

#### Financial Analysis:

There is no additional Net County Cost associated with this request. All costs are offset by billing to County Departments through composite billing rates of computer utilization.

#### CIO Concerns:

None.

#### Recommendations:

Recommend Board authorization of the proposed procurements.

#### CIO APPROVAL

Date Received: 03/29/2011

Prepared by: Tom Travis

Date:

04/18/2011

Approved:

Date:

P:\Final Documents\\SD\BOARD LETTERS AND ANALYSES\05-10-2011 CIO Analysis - Request for Approval to Acquire Computer and Electrical Generator Equipment.docx